

## February 2008

Welcome to the thirtieth edition of the **MassGIS GISette**, a bi-monthly newsletter e-mailed to over 1600 of our users and partner agencies to keep them informed of data updates, GIS events, and on-going technology developments. This newsletter will not replace more focused e-mails that many of you currently receive. A page on our website has been created for the [GISette](#). There you will find back issues of the GISette and an [online subscription form](#).

While our primary intent in publishing the GISette is to disseminate information related to MassGIS initiatives and data development in particular, we also see the GISette as a means of communicating public agency GIS news. So we encourage readers to send in updates or announcements concerning public agencies that they would like included in the GISette. We particularly want to encourage submission of announcements concerning data development projects. Announcements should be sent to Paul Nutting at [paul.nutting@state.ma.us](mailto:paul.nutting@state.ma.us).

### **New Orthoimagery for Eastern Massachusetts**

In spring 2008, the U.S. Geological Survey, as part of its 133 Cities Urban Area mapping program, has contracted for true-color imagery covering 3,000 square miles of Eastern Massachusetts. The project area is roughly the area inside I-495, extending as far south as Route 44 and also includes parts of southern New Hampshire ([see the project area map here](#)). The contractor will use the imagery to produce orthoimages with a pixel size (or ground surface distance) of 0.3 meters (~one foot). These images are expected to be publicly available late in calendar 2008; MassGIS will display and distribute this imagery via its web site.

MassGIS is assisting with the project by coordinating staff resources in state agencies to assist with quality assurance work. Specifically, MassGIS has requested assistance from the Survey Section at MassHighway and from survey staff with the Department of Conservation and Recreation to assist in acquiring surveyed locations for photo-identifiable locations. Coordinates for these field locations will be used in the USGS' quality assurance process. Also, as part of this project, MassGIS has been working to facilitate agreements between the USGS and 30 municipalities whereby the municipalities will be able to "buy-up" to higher resolution (0.15 meter or ~6" pixels) orthoimagery. MassGIS would like to thank staff at regional planning agencies and private consultants who helped with publicizing this opportunity for municipalities.

### **Updated Maps Showing Status of Digital Parcel and GIS Development in MA**

We've recently updated the [Municipal Status maps](#) that show which towns have digital parcels and which towns have GIS. If you have information that differs from what we've presented, please contact [us](#).

### **Online Mapping**

#### **Cape Cod Regional Open Space Plan and Interactive GIS Web Tool**

The Cape Cod Commission's natural resources specialist worked with the GIS department and the Massachusetts Office of Geographic and Environmental Information (MassGIS) to create a Web-

based mapping tool for the Cape Cod Regional Open Space Plan. The tool provides an easy way to view protected and unprotected open space on Cape Cod in relation to significant resources. Currently in a review state (December 2007), [the mapping tool is available at a MassGIS Web site](#). The Cape Cod Commission welcomes comments and suggestions; send them to [Natural Resources Specialist Heather McElroy](#).

## Citizen Mappers Use MassGIS Geospatial Web Services

On occasion we hear from people who are using our web services to fetch our data for use in Mashups. The following article is from one such user:

*Christopher Wren and Gordon Jamieson used the MassGIS Geospatial Web Services (GWS) to publish a [visualization](#) of the geographic distribution of state aid to local municipalities. This work leveraged previous experience using the [Google Maps API](#) to visualize the [geographic voting patterns](#) within the Town of Arlington. Unlike the Arlington application, the State Aid application directs the Google API to request map tiles directly from the GWS servers via Web Map Service queries. The data used to color the maps is in turn provided to the GWS server as a Styled Layer Descriptor (SLD) file hosted on our application server. We combine several data layers on one map using the Google MapType mechanism. Once the layers are cached in the browser, this mechanism allows users to switch quickly between layers, enabling fast, visual comparisons between different data layers. Freed from a*

*substantial coding burden, we were able to spend more time designing the visual style of the maps. Early draft versions of the application again employed the MapType mechanism to allow us to flip between choices of color schemes, implemented by different SLD files. We considered such factors as the connotations our color choices might have and the prevalence of color-blindness in our target audience. To facilitate this design process we automated the generation of the SLD files using a PERL script that processed information exported directly from the original spreadsheet. The MassGIS Geospatial Web Services allowed a pair of citizens to put together high-quality visualization very quickly. It is an indispensable tool for the citizen advocate. We are extremely grateful to the MassGIS for providing this tool and to Saul Farber and Aleda Freeman for their help and advice on this project.*

## Database Updates

- **[Forest Stewardship Program Properties Layer Updated](#) - 2/6/2008**  
This datalayer now contains all plans that had been received and approved by a DCR Service Forester as of October 1, 2007.
- **NHESP CVP Regulatory Layer Updated - 2/4/2008**  
NHESP has updated the [Certified Vernal Pools](#) (January 2008) layer.
- **[Update to OpenSpace](#) - 2/4/2008**  
The MassGIS Protected and Recreational OpenSpace Datalayer has been updated and a new shapefile and personal geodatabase have been placed on our ftp site. Updates include many new features and some geometry and attribute improvements throughout the state. The attribute tables have been modified for the arc and polygon layers, and the Chapter 61 polygon layer has been dropped. See details on the [Open Space Datalayer Description](#) page.
- **[Office of Fishing and Boating Access Sites Layer Updated](#) - 1/28/2008**  
This point layer, formerly known as Public Access Board Sites, was updated by GIS staff at the Massachusetts Department of Fish & Game (DFG).

- **[MEPA ENF Points Layer](#) Updated** - 1/24/2008  
Point layers were added for 2007 Q4.
- **[Massachusetts Coastal Zone Layer](#) Updated** - 1/15/2008  
This version corrects many errors and is much closer to the defining language than the older layer.
- **[DEP Solid Waste Facilities Layer](#) Updated** - 12/28/2007  
The MassDEP Bureau of Waste Prevention updated the data, making the following changes: 44 polygons were added, 4 were deleted, and 57 were redrawn; also, 18 ID's were edited.
- **[New Surface Water Supply Watersheds Layer](#)** - 12/28/2007  
This datalayer contains the watershed extents for all surface water supplies including active, inactive, emergency, sources outside of Massachusetts, watersheds that extend into other states and watersheds of sources from other states that extend into Massachusetts.
- **Updates to DEP Public Water Supply Layers** - 12/28/2007  
The MassDEP GIS Group has updated the following layers:
  - [Public Water Supplies](#)
  - [Zone IIs, IWPA](#)
  - [Surface Water Supply Protection Areas \(Zone A, B, C\)](#)
- **[Title 5 Layer](#) Updated** - 12/28/2007  
Data statewide were updated to remove the areas of wetlands and hydrography that were buffered from the buffered area, so only the area of the buffer is included in the datalayer.
- **[Drainage Sub-basins Layer](#) Updated** - 12/28/2007  
The attributes for Public Water Supplies (WSP field) were removed.
- **[C21E](#) and [AUL](#) Point Layers Updated** - 12/28/2007  
MassDEP has updated the Tier Classified Oil and/or Hazardous Material Sites (MGL c. 21E) and Oil and/or Hazardous Material Sites with Activity and Use Limitations (AUL) layers.
- **Three layers removed**  
Because of currency and data quality concerns, the Abandoned Cranberry Bogs and [Underground Storage Tanks](#) layers have been removed from distribution from the MassGIS Web site, as of 2/13/2008. Also, the [State Register of Historic Places](#) layer was removed (as of 1/31/2008) at the request of the Massachusetts Historical Commission (MHC), as it updates location inaccuracies and omissions in this layer dating to 1997.

## **Staff News and Meeting Announcements**

### **MassGIS Exhibit at Massachusetts Association of Conservation Commissions**

MassGIS will staff an exhibit at [the annual conference](#) on March 1<sup>st</sup> at Holy Cross College in Worcester.

Stop by to learn about the [Macmapp](#) software, data, and training bundle grant offered to conservation commissions and non-profit land trusts, or to pose any other questions you may have.

### **Is there a Map to the Maps?**

There are several interesting mapping related events and exhibitions happening in and around Boston in the coming months. The Boston Public Library is hosting a bird's eye view map exhibition and Harvard University has several upcoming exhibits. A list can be found [here](#).

## Massachusetts Geographic Information Council Seminar Series

**CAD and GIS Interoperability** to be held at two locations in March. March 21<sup>st</sup> from 2 PM to 4 PM at Bristol Community College and March 28 from 10 AM to Noon at the Auburn, MA Town Hall. The link above has speaker and co-sponsor details, as well as directions to the venues.

## Spring NEARC 2008

Northeast Arc Users Group spring conference. Tuesday, May 13, 2008, Smith College Campus Center, Northampton, MA. The link above provides more information.

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Any comments or suggestions about the GISette are welcomed [paul.nutting@state.ma.us](mailto:paul.nutting@state.ma.us).  
MassGIS-The Commonwealth's Office of Geographic and Environmental Information is located within the Executive Office of Energy and Environmental Affairs and is charged with the collection, enhancement, storage and dissemination of the Commonwealth's geographic data.

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